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Art. I.—ARMY MEDICAL REPORTS.

By Jos. J. B. Wright, M. D., Assistant Surgeon U. S. Army.

It was an apothegm of the ancient Jews, that "no man discharged his duty to his country, who died, without having planted a tree, built a house, and left a child behind him." If I was asked to suggest an improvement of the saying, I would intimate that the *physician* is obnoxious to the charge of neglect of duty to the community, who passes through life, without having at least attempted to discover some new fact, or verify some already expressed hint, which may sustain the relationship of an improvement, either directly, or indirectly to the ars medica; leaving it for others to clothe the proposition in the precise and appropriate language of an axiom.

It is with the hope of being able, if not to exhibit an undiscovered truth, at least to furnish evidence in regard to the comparative worth of some of the weapons with which we ordinarily combat disease, that the author of the present paper ventures to appear in the pages of your journal.

For the last seven years, the Power that rules his destiny has afforded him opportunity to observe diseases, under the influences of the various climates, and the sundry circumstances which are supposed to modify complaints, as well as constitutions, in sections of the United States, varying from the twenty-sixth to the forty-fifth degree of north latitude, and through an extent of longitude, included between the Atlantic coast and the western limit of Arkansas.

It is proposed, in the series of essays, which the writer will offer for publication in your periodical, if they should prove acceptable, to limit attention, to a consideration in a general way, of the cases which have fallen to his lot, as one of the medical staff of the army; and he would here, in limine, bespeak the indulgent charity of the censors, whilst he pleads in justification of his attempt to confirm the opinion of the wavering, or dispel the doubts of the skeptical, a sense of bounden duty to his professional friends; and in excuse for its defects, that he lacks the facile skill which practice alone can give, in catering for the public taste.

The writer got an introduction to the diseases, prevalent in the army, at Fort Gibson, a post situated on Grand River, two miles above its entrance into the Arkansas, in the winter of 1833-34. This fort, whether deservedly or not, sustains the character of "charnel house of the army." Certain it is, that during the year 1834 and part of 1835, no term can be found in any

language, which would do injustice to its character for insalubrity, if we regard only the number of cases within its chain of sentinels, and the mortality which made the scene so tragical. During the summer of 1834, most of the troops west of Arkansas, dragoons as well as infantry, were on distant duty in the prairie: the former in a campaign to the Pawnee towns on the border of Mexico, and the latter building new posts on the Canadian and Red fork of the Arkansas. They all returned to the garrison about the close of summer with a very large sick report. The commands, therefore, were exposed to other influences than those which exist at Fort Gibson, and in justice to the good name it erst aspired to, the fact ought to be recollected. However, that the post would have been unhealthy, might have been inferred from à priori reasoning, if exposure to vicissitudes of temperature, and proximity to extensive low grounds, in a southern latitude, favour the supervention of disease.

During the writer's residence at Fort Gibson, the mercury in Fahrenheit's thermometer fluctuated through one hundred and twenty-seven degrees; rising in the summer months to 116, and falling in the winter to 11 minus zero! The almost unparalleled elevation indicated cannot be attributed to any inaccuracy of the instrument, or any fault in its site; the observation having been registered from one of two thermometers, which exhibited the lowest elevation of the mercury, both being placed in an airy position, under the piazza of the hospital, which afforded an effectual shade from the sun's rays.

The valley of the Arkansas is subject to occasional inundations from the river, to an extent which often renders the labour of the husbandman of precarious avail, whilst it makes some parts of it, almost uninhabitable. I write with literal regard to truth, when I say, that in the vicinity of the river, from its mouth to the Verdigris, a distance of perhaps seven hundred miles by water, the traveller will scarcely meet a rubicund visage, or a face and form bearing the impress of good health. Perhaps an exception ought to be made in favour of those who more happily reside, in one or two of the towns on the river, but if the whole truth were gazetted, it is believed a statement of facts would not do even them any considerable credit for salubrity.

Having in view to exhibit recollections of cases which have come under my observation in the army, it may be proper to begin at the beginning. The present essay will relate, therefore, to the acute cases of the winter months, and the chronic forms of disease which were continued in the hospital, at Fort Gibson, since the previous autumn. A consideration of the most interesting cases, viz. the fevers of the summer months, may constitute the second paper of the series.

The prevailing diseases of the winter derived their characteristics from vicissitudes of temperature:—Pneumonia, Pleuritis, Acute and Chronic Bronchitis, and Rheumatism, Catarrh, Phthisis Pulmonalis, and Ophthalmia, made up the register of cases admitted to hospital. The patients who were continued from the previous summer, and autumn, laboured under intermittent fever and its sequelæ, enlargement of the liver and spleen, chronic inflammation of the mucous coat of the stomach and bowels, assuming the form of dyspepsia, chronic dysentery and diarrhœa.

The first named inflammatory affections were treated in the ordinary way, and with perhaps a common result. If any fact impressed itself with signal force on my attention, it was the eminent advantage of copious abstraction of blood from a large orifice, in the incipiency, or at least at a very early stage, of the disease. My observation affords me satisfactory evidence of the oft-repeated truth, that it is not so much the large quantity of blood abstracted, within the first few days of an intense inflammatory affection, as the effect produced by a first venesection, on which we should rely in the management of this class of diseases. Most of the cases of pneumonia and

pleuritis yielded readily, after the tone of the system was thus reduced, to counter-irritation over the seat of disease,—an occasional dose of calomel and opium, and gentle antimonial diaphoretics.

The cases of acute bronchitis required ordinarily a resort to the lancet, after which they subsided for the most part, under the operation of common expectorants. When, however, the symptoms were unusually persistent, an irritation more or less extensive, over the surface of the chest, by blisters, or antimonial ointment continued for a greater or less time, rarely failed to extinguish the disease.

The catarrhal affections were made to succumb generally by a resort to an emeto-cathartic of sulph. magnes. and antim. tartarizat., followed by the expectorant and sudorific compounds, usually exhibited in such cases, with due attention to clothing, and avoidance of exposure to the weather. This form of disease, when neglected, betrayed a constant proclivity to bronchitis.

Many of the cases of acute rheumatism creditably sustained the character of this corps of the "grisly troop," for obstinacy.

My experience in the management of this affection has persuaded me that too much danger is apprehended of favouring its conversion to the sub-acute or chronic form, and its metastasis to the vital organs by liberal depletion. My success in its treatment has been more satisfactory, when in the forming stage I have abstracted blood liberally, and I have not witnessed the untoward effects which we are taught to fear from the measure. The symptoms have frequently exhibited, in the course of the disease, evidence of a pathological condition of the heart and pericardium, but not oftener, under my observation, when the lancet has been used, than when it was withheld.

Abstraction of blood by cups applied over the seat of pain, when the larger joints are involved, is a remediate measure to which I am much attached, from observation of its advantages, though in order to derive the utmost benefit from the scarificator, it is necessary that the operation should be performed in an effectual way—at least half a pint of blood should be taken from the knee, for instance, when much swelling and pain exist. I am persuaded that too little attention is given by the generality of practitioners to the condition of the first passages in acute rheumatism, having almost invariably found the disease much less refractory when an active purge is given in the commencement, and occasionally repeated during its progress. When the attack has not yielded to the means here noticed, with their common-place co-adjutants, I have rarely known it continue many weeks under the influence of minute doses of calomel and dov. powder. In the chronic form of the disease I have seen marked benefit result from the use of the vinous tincture of colchicum, when the synovial appendages of the joints might be presumed to constitute the seat of pain, and when the fibrous structures are principally implicated, my experience has induced me to rely on the mistura guaiaci, with more confidence than on any other individual article. The tincture of phytol. decandr. has in several instances commended itself to my favour as a remedy in this affection, the preparation being made from the berries; and the popular prescription of nit. potass. in diluted alcohol has seemed, in some instances, to have a claim to respectful regard. The usual adjuvants, viz. blisters, liniments, friction, &c. have been brought in requisition, but principal reliance has been placed on the means indicated above.

Phthisis pulmonalis at Fort Gibson, as elsewhere, merited its title to a place in the front rank of the opprobria medicorum. I allude to it here, with the sole view of remarking, that there is not perhaps, on the earth's surface, an *inland spot* more ineligible for a consumptive patient; the temperature sometimes undergoing a change of thirty degrees in a few hours. The prevailing winds during the summer are from the southwest, bearing on their wings the most oppressive heat, but ever and anon, old Boreas, inflating his lungs, asserts his empire, and from his habitation in the Rocky Moun-

tains, sends his chilling breath over the plains below, scattering almost as many evils as fable attributes to Pandora's box. I will remark, en passant, that among the palliatives used in the management of the cases of pulmonary consumption, large doses of opium and sulphate of iron, as recommended I believe by Dr. Morton, were exhibited with a view to control the colliquative diarrhœa, and with apparent benefit.

There prevailed at Fort Gibson an undue proportion of cases of acute and chronic ophthalmia. If any peculiar circumstances exist there to excite this form of disease, I am unacquainted with them. In many instances the cases were allied to rheumatism, and so far they may be accounted for; but a majority did not bear any such relationship, and I can only attribute its frequent occurrence, to the abrupt atmospherical vicissitudes acting upon, and determining disease in organs habitually predisposed to deranged action, by exposure to the intense light of the sun operating *directly* upon them, and *indirectly*, by reflection from the white sand, which constitutes the superficies of the soil in that vicinity.

It may be remarked here, that ophthalmia prevails to a very large extent among the Osage Indians, who inhabit a section of country on the head waters of Grand river. The frequency of the disease among the Indians has been ascribed to a custom which exists among them, of plucking out the hair of their supercilia, thus depriving the eye of the protection from the rays of the meridian sun, which this natural contrivance affords. My experience in the treatment of this disease has not enlarged in any considerable degree my knowledge of the means of combating it successfully. Most of the varieties of inflammation of the eye and its appendages were occasionally presented; the predominant form was conjunctivitis;—next, in frequency of occurrence, was sclerotitis; a few cases of iritis, of syphilitic origin, contributed to make up the variety. The conjunctival form, in its advanced stage, generally implicated the cornea, which became obscure, and occasionally ulcerated.

The cases were managed in the way taught in the schools, and throughout their course furnished very little theme for original remark. They have only left on my mind, at this distance of time, the impression, that in the advanced stage of conjunctivitis the nit. argent. collyrium is, by a majority of practitioners, used of insufficient strength; that in obscurity of the cornea, from protracted inflammation, the lunar caustic should be applied, without stint in substance, to its surface, and that the system should be made to feel at once, the mercurial impression. My acquaintance with the numerous cases which occurred there, gave me opportunity to test the value of aqueous solution of opium, applied to the eye, where great intolerance of light exists. The remedy has my unqualified approbation, having derived more advantage from it, in this way, than from any other application.

Having thus disposed in a discursive way of the prevalent diseases of the winter season, those cases which were continued in hospital from the previous summer come next to be considered.

A majority of these patients it has been remarked, laboured under protracted intermittent fever, and its sequences. It need not be said that in malarious districts of country, this form of disease, which, if the doctrines of the schools be correct, can only originate during the heat of summer, may nevertheless exist throughout the whole year. It may be affirmed, indeed, that in southern latitudes it exercises most obstinate sway in the cold season; its right to empire seeming to be yielded to its more desolating brothers, of the remittent and continued types, during the months of their reign; and it is remarkable that it is very apt to make the quondam subjects of *their* rule, the victims of *its* operations. I am so well satisfied of this fact, that I have become a convert to the opinion of MacCulloch, which maintains as a general rule, that patients will not recover from the diseases of this family, so long as they remain in the country in which they acquired them. To arrest intermittent fever is the easiest thing imaginable, but to confer, by

medication, exemption from subsequent attacks—"aye there's the rub." The revolutionary action of the mercurials will not do it—no attention to diet, no avoidance of exposure, will do it; no course of tonics, given with a view to invigorate the impaired energies of life, will effect the object. Nothing in fine, will afford immunity from occasional returns of the paroxysm, but removal from the country. I have good reason for believing that a short residence in a section where the disease does not exist, will afford comparative security from future attacks, but what is the shortest limit of absence, which may suffice in ordinary cases, my observation does not enable me exactly to determine. It is not maintained that all who have had fever and ague must absent themselves from the region of country in which they became sick—spontaneous instances are of frequent occurrence, in the northern latitudes, where the patient will completely recover, after one or two series of paroxysms. Here the cause of the disease may be supposed to have but an ephemeral existence, or the malaria is in so slight concentration, as to require some accidental disturbance of the economy to enable it to institute its action; but in the southern climates, where the disease is endemical, I had almost said epidemical, nothing short of an alibi will afford protection from relapse.

The writer has not in his possession a record of the cases of intermittent fever, which have been the subject of his charge during the last seven years, but he is safe in saying, that the number certainly amounts to some thousands. In regard to the quæstio vexata—of the expediency of administering medicines addressed to the primæ viæ, preliminary to the exhibition of the article having direct control over the paroxysms, his experience teaches that such precautionary measure is not so indispensable to the *interruption* of the disease, as was once believed. He has instituted sundry experiments, at different times, and under a variety of circumstances, with intent to get at the truth on this subject. All his inquiries persuade him that, very often, the time occupied in this preparatory process is, in effect, thrown away. When the symptoms manifest a deranged state of the stomach and bowels, of course this condition must be removed, by the appropriate medicines, in limine. Occasionally we meet with a subject of this form of disease, the tone of whose system we are required to reduce by blood-letting, in advance of the exhibition of remedies during the interval; but in a great majority of cases we will best succeed in abbreviating the sufferings of the patient, by entering at once on the use of the bark, or other article selected; for it will be found in those localities where the disease prevails most extensively, that we will not derive compensation for the suffering, involved in the repeated returns of the paroxysm, whilst we are preparing the system for the anti-febrile remedy, in any diminished liability to its recurrence, when it shall have been interrupted. An exception may be made to the above statement, in favour of the doctrine of critical days, or the alleged tendency of this disease to septenary periods, both in its approach and subsidence. I am well satisfied, that this quality is one of the elements which make up the character of intermittent fever; having in repeated instances secured to patients a greatly prolonged term of comparative health, by avoiding all interference, where extraordinary indications did not exist, until the day preceding the seventh, in quotidian, and the fourteenth in tertian, from the date of the attack, when I have been in the habit of exhibiting the quinine, in doses of from ten to fourteen grains during the twenty-four hours; and when the patient has been subject to repeated attacks, on slight exposure, I have given the article in the quantity above indicated, on the sixth and thirteenth days (according to the type of the affection) after the last paroxysm, seemingly, at least, with the effect of preventing a recurrence of the chill for several weeks.

In all the types of intermittent fever, I have relied mainly on quinine, giving it in the shape of super-sulphate, in solution. It is exhibited usually in divided doses, during the apyrexia.

It is no mean praise of the article to say, that I have never witnessed its failure to put an immediate stop to the disease after the second paroxysm; in ninety-nine of an hundred instances, there is no return of that *series* after the exhibition of the quinine.

I have given a fair trial to all the various articles recommended as substitutes for the bark, but though many of them will certainly arrest the paroxysms, in time, none are entitled, in my estimation, to respectful notice, in comparison with this ipse agmen.

The tourniquet practice has failed in my hands, and the plan of bleeding in the cold stage has not, under my observation, been productive of the almost miraculous cures, which Mackintosh, and others, give it credit for. I will confess, that I entertained from the first strong prejudices against the measure, though it came highly recommended by authority; and it is perhaps due to that authority to admit, that the idea comported so illy with all my pathological notions, in relation to the disease, that I have not frequently resorted to it. I am familiar with the ratiocination, by which the advocates of the practice explain the removal of the blood, in the congested viscera, but to my mind, it is not satisfactory. If that portion of the venous system, distributed upon the surface and extremities, was in a state of repletion, it might be alleged that by abstracting its contents, the blood, accumulated in the internal organs, might be coaxed to the periphery, to supply the approach to vacuum, resulting from the abstraction, and that thus, the balance of circulation might be restored.

In the cold stage of intermittent fever, and in the congestive fevers, of which it is the type, the sanguiferous system of the entire surface, and extremities, is in a state of comparative emptiness. This vacuity of these vessels is in truth an essential condition of the pathological state which exists—the measure recommended is calculated, in its very nature, to aggravate this symptom, and, to my comprehension, it is not apparent how it can relieve the suffering organs, constituting the seat of the congestion. I am aware that I incur the imputation of medical heresy, but I repeat that the process of reasoning, by which authors enforce the advice to bleed from the arm, in congestion of the larger viscera, has never seemed to me even plausible; and moreover, a frequent resort to the practice, in forms of disease in which congestion gave character to the case, has not tended to dispel my misgivings of the soundness of the doctrine. I can readily conceive that in those cases which have ultimately terminated happily, in my hands, reaction was due to the warmth externally applied—the extensive counter-irritation of the surface, and the remedies addressed to the stomach and bowels, rather than to the venesection,—I had almost said, in spite of it.

It may be true that abstraction of blood, during the chill, where the vital forces are not oppressed beyond the power of successful resistance, may moderate the subsequent reaction, and thereby, in some instances, contribute to the cure; but a very large majority of our patients, in sections of the country where the disease prevails to its greatest extent, will not bear with impunity such subduction of vital energy as is implied in the operation. The danger of increasing the hydropical diathesis in most of the protracted cases is not, I conceive, the least evil to be apprehended from the practice.

The cases of chronic enlargement of the liver and spleen, were treated, the first, by mercurials, given to the extent of slight ptyalism—counter-irritation over the diseased viscus, by blisters—cupping; and the empl. hydrarg. applied to the gently irritated surface, with attention to the minor considerations, which suggest themselves to every physician. The engorgement of the spleen yielded, in a majority of instances, to similar means, (the mercurials being omitted, for the most part), with the additions of the preparations of iodine, used externally and internally. The hydropical affections, bearing the relationship of sequelæ to the diseased conditions named, subsided ordinarily under the methodus medendi instituted for the removal of the latter. Squill and digitalis were generally conjoined to the mercurials,

where there existed anasarca, or ascites. An occasional dose of comp. pulv. jalap. uniformly facilitated the removal of the infiltrated serum. Subsequent to the removal of the engorgements, and the resorption of the effusions, the patients were put under the influence of a tonic course.

I had here an opportunity of testing the claim to notice of an indigenous article of medicine, but slightly used, I apprehend in any country. I allude to the Indian hemp—the apocyn. cannabinum. I am aware that the profession is not to be informed that it possesses medicinal virtues, but the opinion is entertained that if it were better known, it would be more esteemed. I have used it with marked benefit, in hydropic diseases, in form of decoction of the root, in such quantity as slightly to nauseate the stomach. It has rarely failed in my hands to excite free diuresis. The objection to the article is, that it is very apt to excite vomiting, and sometimes, when it acts on the bowels, painful tormina.

Chronic dysentery was of very frequent occurrence. Its subjects were, in a majority of cases, those whose general health was impaired by repeated attacks of int. fever. It presented itself in every grade of violence, and often proved obstinate and intractable. The medication consisted in cupping and blistering over the region of the colon—the exhibition of calomel, opium, and ipecac. followed up at intervals with castor oil,—mucilaginous drinks, and opiated injections, with an entire avoidance of all ingesta which could in any wise add to the irritation of the mucous tissue of the larger bowels; but the internal remedy which most commended itself to my favour, was the prescription of Dr. Stokes of Dublin: viz. the hydr. cum. cret., with, and without, opium. It is, in my estimation, an article having high claims to confidence. The acq: camphorat., et elix. vit: with addition of sol. sulph. morphiæ, at regular intervals of a few hours, has in numerous instances controlled the affection, when other remedies have failed.

A memorable case of dysenteric affection limited to the rectum, occurred during the time to which these remarks relate, which has left an enduring impression on my memory. It was that of Lieut. W—— a promising young officer who was convalescent from a grave form of bilious remittent fever, and whose morbid appetite was not to be satisfied but by such indulgence, as endangered, and ultimately cost him his life. The case was managed on general principles. It would be unprofitable, therefore, to narrate the particulars; it is sufficient to have intimated its issue, but I would here take occasion to remark, that this portion of the intestinal canal has always seemed to me more isolated from the rest of the body, than almost any other viscus. It has fallen to my lot subsequently, to witness inflammatory affections of this intestine, pursuing an onward course, unchecked by medication, to disorganisation, and death; leaving the impression that however intimately it may be connected by sympathy, in some of its diseased conditions, with the system at large, its morbid states can scarcely be reached by constitutional remedies, and my experience teaches, that local appliances do not afford so much satisfaction, as in most other cases of inflammation, in which the whole system is ultimately brought to sympathise with an affection, at first purely local.

The common forms of diarrhœa were readily controlled by the opiate, astringent, and cretaceous preparations, with the occasional addition of minute quantities of calomel. It occurred to the writer, to witness several cases of rather a rare form of disease, whilst on duty in Arkansas: viz. gangrene. The subjects were all of the Cherokee, and half-breed Indians, who live in the vicinity of the fort. In regard to the mooted question, whether this affection is due in all cases to some abnormal action of the mercurial medicines, opportunity was afforded me of arriving at a satisfactory conclusion. The cases were all well marked, and occurred in children who had not taken medicine of any kind, until my attention was directed to them. In all these instances the disease came on without the slightest agency of mercurials. In one case, the affection extended to the alveolar process of the

upper-maxillary bone, which became necrosed, to an extent involving the site of three of the first teeth. This portion of the process was removed, the teeth having fallen out, and the disease in the soft parts, being arrested by blisters, and the free application of argent. nitrat., together with the use of detergent epithems, into which the Peruvian bark and the chlorides of lime and soda entered, the patient ultimately recovered.

JOSEPH J. B. WRIGHT, M. D.
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Fort Armistead, E. Florida, March, 1841.

Art. II.—CASES OF MAMMARY ABSCESS, TREATED BY COMPRESSION.

To the Editor of the Medical Gazette.

Sir:—If you think the following article worthy of a place in your valuable periodical, its early insertion will oblige, sir,

Your most obedient servant,

JOSEPH BELL.

Barrhead, Oct. 16, 1841.

In the part of the Med. Gaz. for last month, there is a valuable extract from an article "On the use of Compression in the Treatment of Mammary Abscesses," by MM. Trousseau and Contour, and which appeared in the *Journal des Connais. Méd.-Chirurgicales*, Janvier 1841.

Having experienced very great benefit from the employment of compression in such cases, I have been induced to send the present communication for publication, in order to attract as much attention as possible to a means of cure which, though frequently brought under the notice of the profession, yet, so far as I can ascertain, is very seldom employed.

The editors of the Dublin Medical Press favoured me by publishing the following case and remarks in their journal for 23d December, 1840.

May 12th, 1837. Mrs. C., ætat. 26 years, mother of two children. She is of ordinary stature, dark complexion, considerably emaciated. Complains of severe pain of left mamma, which is discharging large quantities of purulent matter from a small opening situated a little above the nipple, on the outer aspect of breast, which measures in circumference 26½ inches; on its superior aspect it measures 12 inches from base to nipple, and 9 inches inferiorly.

It is very hard and painful, particularly at the upper part; the hardness is irregular and knotty; integuments over upper side red and tender; pain extends to axilla of same side, and down arm to fingers; some milk comes occasionally from nipple; the lacteal secretion is very scanty in right mamma; general health much impaired; has no appetite; tongue covered with a dirty white fur; thirst; skin hot and dry, but at night is covered with a profuse perspiration; pulse 120, feeble; can obtain no sleep from pain; bowels said to be regular; has been confined to bed nine weeks; suppuration commenced eight days after the birth of her youngest child, now three months old.

The abscess was opened by her medical attendant about a fortnight afterwards, from which time she has constantly applied linseed meal poultices, according to his directions.

Applicat. fascia Mamm. sinistr. et habt. haust. Anodyn. h. s. ex Sol. Mur. Morph. gtt. xxx.; Tr. Hyos .Nig. ℥j.; Aq. Cinnamomi, ℥j. M.

14th.—Great relief of pain instantly followed application of the bandage. To-day she has no pains whatever; she looks more cheerful; has slept well for the last two nights; appetite improved; tongue cleaner; skin more natural; perspiration at night less; pulse 84; bowels regular; breast now measures only 17 inches in circumference, 6 inches from base to nipple superiorly, and 5 inferiorly; hardness much less, and discharge considerably decreased; redness of integuments gone.

Cont. fascia sed intermitt. haust. Anodyn.

18th.—Bandage came off on the night of 16th; I could not find it convenient to apply it till to-day. Breast more swollen and painful than on the 14th, but not near so much as it was previous to application of bandage; hardness increased, particularly in direction of left axilla; pulse 100; did not rest well last night; bowels costive.

Cont. fascia et habt. Ol. Ricin. ℥j.

21st.—Breast has been always easier since the bandage was applied on the 18th. All pain is now gone; breast much reduced in size, it is now no larger than a small fist; discharge almost ceased; pulse 76; bowels freely opened by oil, and have been regular since.

Cont. fascia.

June 1st.—Breast is now well; general health good. Attendance discontinued.

Remarks.—The above case illustrates the beneficial effects that have resulted from compression in several cases of mammary abscess which have come under my observation. I have found it also exceedingly useful in cases of sinuses, which are frequently the sequelæ of mammary abscesses. In one case the sinuses were of nine months' duration, and had resisted a great many applications, but were completely cured in ten days by compression.

This treatment is by no means new, although I believe it is not generally known. I was not, however, led to adopt it from any authority, but from a preconceived notion. It afforded me great pleasure to observe it strongly recommended by a writer in the *London Medical Gazette* (vide vol. xxii. pp. 389, 419.) This gentleman seems to think that the treatment had not been brought under the notice of the profession previous to the appearance of his paper on the subject. We find, however, the practice highly lauded by M. Jules Cloquet, in a clinical lecture on abscesses of the mammæ delivered in 1837 (vide *La Presse Médicale*, 1837.) He mentions a case of six months' duration, "treated to no purpose by all other means, which yielded to compression as if by enchantment." I intended to have published the first case which I treated by bandaging, when it occurred, but delayed doing so in order to test its effects in other instances, in all of which I have found it successful. I use a common roller about nine yards long, which I apply round the chest and shoulders, so as to make gentle and uniform pressure on the affected breast; openings are made in the bandage to allow free exit to the discharge. The greatest care must be taken to have the bandage equally applied, as, if it be allowed to press more on one part than another, we will to a certainty not only aggravate, but cause the very affection we are endeavoring to combat. In order, therefore, to be successful, the roller must be carefully and judiciously applied.

Since the above was written, I have treated five cases of mammary abscess with the greatest success by compression. Two of these I will now quote: in these instances I employed strips of adhesive plaister, as recommended by MM. Trousseau and Contour.

Case I.—Jan 6, 1841, Mrs. T———r, æt. 32 years, mother of four children. She is of full height, fine complexion, and of ordinary stature; a native of Ireland. Right mamma has suppurated, and is discharging, from an opening under nipple, a large quantity of purulent matter; breast much swollen, very painful, and hardened, particularly the under side, where the

skin is red and tender; pulse 100; tongue foul; thirst; sleeps very little; is exceedingly restless; bowels costive.

Was delivered of a male child six weeks ago. Shortly after this her breast suppurated, and was opened by a surgeon on the 9th ult. She has been using poultices and ointments since.

Admov. fasc. Mamm. dextr. et habt. Ol. Ricini, ℥j.; Tr. Hyosciam. Nigr. ℥iss.; Aq. Cinnamom. ℥jss. stat.

7th.—Slept some last night; oil operated twice; bandage has come off this morning; pulse 96; mamma much easier; swelling less.

Continuentur omnia.

10th.—The bandage, either from the restlessness or the carelessness of the patient, cannot be kept properly applied; mamma not improved, but rather more painful and enlarged.

Strips of common adhesive plaster, about two inches broad, were applied round chest (somewhat in the manner used in the Bayntonian treatment of ulcers,) so as to make firm compression on breast, and, at the same time, to allow free passage to the discharge; a bandage was applied over the plaster in the usual manner.

12th.—Great improvement; pain, swelling, and discharge, greatly abated. Pulse 76; sleeps well.

Continuentur.

22d.—Mamma quite well; is as small as that of left side; no hardening; no pain even caused by firm pressure with the hand; opening has been healed since 16th. Attendance discontinued.

Case II.—March 22, 1841. Mrs. M'W ——, æt. 22 years. A tall delicate female, fair complexion, a native of the north of Scotland, on the 6th inst. was delivered of her first child. She had a good recovery until the 14th, when her right breast became inflamed, and despite the usual remedies to procure resolution, suppuration took place; it was incised yesterday, when several ounces of yellowish matter escaped. The abscess is deep seated, and the breast is very much enlarged, exceedingly painful, and is discharging profusely; pulse 100; pyrexia.

Utat. Compress. Mamm. dextr. c. Emplas. adhesiv. extens. et fascia, more solito.

24th.—Mamma doing well; pain, tumefaction, and hardening, rapidly subsiding; health improving; feverishness gone.

27th.—Breast nearly well, but plaster has produced considerable irritation of the skin over which it was applied, causing abrasion in some places and much pain.

Intermit. Emplas. Adhesiv. sed. cont. fasc. et utat. Ungt. Simpl.

31st.—Mamma quite well; tenderness of integuments almost gone.

Remarks.—In Mrs. T.'s case I was led to employ the plaster in consequence of being unable to keep the bandage properly applied to the breast. Finding in her case that it retained its place much better than a simple roller, I have used it in all the other instances which have occurred to me since. This is an advantage which it possesses over the common roller; but, on the other hand, as will be seen from M'W.'s case, very great irritation of the integuments was caused by the plaster. The same effect was produced in two other instances. In these, however, the evil was obviated by substituting a finer quality of plaster (for that in common use,) sold here under the name of Leicester plaster. Not the slightest irritation or uneasiness was caused by its application.

I have been so well pleased with the result, that I shall use it in future in all such instances.

Perhaps it should be mentioned here, that Dr. M'Dowall, of Dublin, has invented an instrument for making compression in cases of mammary abscesses. In the Dublin Medical Press for Dec. 30, 1840, this gentleman in a note (referring to my communication which appeared in the previous number) states, "I have been in the habit of employing compression for

some years past in those cases (abscesses of the mammæ,) and the result has been such as to lead me to coincide with Mr. Bell in his views on the subject. I have invented an instrument for the purpose, which I have found to possess many advantages over either the bandage or the other modes of compression usually employed. This little instrument is extremely simple, being composed of two springs curved in a peculiar manner, and crossing each other at right angles, having a pad at each extremity. In adjusting it, the extremities of the springs are drawn asunder, and the breast being placed between them, are allowed to close gently upon it: the stays may then be closed over it, or, if the stays cannot be worn, a small bandage round the chest will do. When thus fixed, the instrument holds the breast firmly, as if it were grasped by the hand, and can be used with very little trouble or inconvenience to the patient.

Whether or not this invention of Dr. M'Dowall be calculated to effect the object in view I cannot say, as I have neither seen nor used the instrument. If, however, it make sufficiently firm and uniform compression on the breast, it certainly must be a preferable means of treatment to either bandage or adhesive plaster.

In conclusion, I would observe, that from my experience of the use of compression in these cases, I can conscientiously join with MM. Trousseau, Contour, Dr. M'Dowall, and others, in strongly recommending the treatment to the profession, as most efficacious and speedy in its effects; alleviating much pain and suffering to the patient, and saving much time, trouble, and annoyance to the medical attendant.

From what I have witnessed of the employment of adhesive plaster, I consider that its application should be preferred to the bandage, as the former is not so easily removed either by the carelessness or restlessness of the patient as the latter, which, however, is even itself of admirable utility in the treatment of this really painful and tedious affection to which the mammæ are so liable, particularly at a time when a due performance of their function is so much required.

BIBLIOGRAPHICAL NOTICES.

Introductory Lectures.

We have received various introductory lectures, which have appeared to us generally well adapted to the objects which their authors had in view,—that of placing before the student the character of particular departments of the science; the mode in which the Professors design to teach it, with the claims it has on the attention of the student; and an occasional digression on the condition and prospects of the School to which they are respectively attached.

Of the lectures before us, three were delivered in the Jefferson Medical College, by Professors Bache,[1] Meigs,[2] and Dunglison.[3]

The *Lecture of Professor Bache* is strictly introductory to his subject,

[1] Introductory Lecture to the course of Chemistry, delivered in Jefferson Medical College, Nov. 3, 1841, by Franklin Bache, M. D., &c. &c., 8vo. pp. 16, Philad. 1841.

[2] Introductory Lecture to a course of Obstetrics, delivered in Jefferson Medical College, Nov. 4, 1841, by Charles D. Meigs, M. D., &c. &c. 8vo. pp. 18, Philad. 1841.

[3] An Introductory Lecture to the course of Institutes of Medicine, &c., delivered in Jefferson Medical College, Nov. 1, 1841, 8vo. pp. 24, Philad. 1841.

and contains an able and interesting sketch of the importance of the study of Chemistry, and the advantages that have resulted from its cultivation, not only to medicine, but to the useful arts and to science in general. We extract that portion of it which treats of its application to Medicine. It will give an idea of Professor Bache's matter and manner.

"It is pharmaceutical and medical chemistry which it is my duty more particularly to teach in this College. And here, gentlemen, let me stop to inquire, is chemistry, in its applications to medicine and pharmacy, worthy of your regard? This is an important preliminary question; for if you follow the ensuing course under the erroneous impression that you can be respectable physicians without being chemists, your attention will flag, and the knowledge which you will derive from my lectures will be insignificant; but if I can convince you in the outset that an intimate connection subsists between chemical and medical science, and that a knowledge of chemistry is an indispensable prerequisite to the successful prosecution of your profession, I shall hope to secure your undivided attention.

"The applications of chemistry to medicine will now be briefly noticed; and first, of its application to physiology.

"Although it has been conceded that vital phenomena must be considered as regulated by a distinct set of laws, yet it does not follow that they cannot be elucidated by chemistry. Vital phenomena are the result of the reaction of organic particles; chemical phenomena, of inorganic ones. Hence physiology and chemistry agree in studying molecular attractions, occurring either within or without the precincts of vitality. As the anatomist separates the grosser parts, and detects differences in structure; so the chemist executes a more minute dissection, by demonstrating the chemical nature of the different animal solids and fluids. Thus it is that the science of physiology is based almost entirely upon the facts furnished by anatomical and chemical research.

"The subject of alimentary substances requires for its elucidation the aid of chemistry. By its means, the different kinds of food are analyzed, whether derived from the animal or vegetable kingdom, the peculiarities of each noted, and the relation which these peculiarities may bear to their nutritive power. In experiments relating to the vital process of absorption, the physiologist can hardly proceed a single step without the aid of chemical knowledge. The tracing of different substances, purposely introduced into the stomach to determine whether they afterwards pass into the blood and secretions, can only be performed by chemical tests, capable of detecting minute portions of matter, which elude the observation of the senses.

"The process of digestion cannot be successfully studied without the aid of chemistry. It is impossible to give an account of what is known in relation to this subject without constantly recurring to chemical principles. The gastric juice has been examined by a number of able chemists; still much remains obscure and unexplained. Its power, out of the stomach, to dissolve various alimentary substances, was demonstrated by Spallanzani and others; but for the production of true digestion, the nervous influence appears to be necessary.

"Of all the functions of the body, none have received more important elucidations from chemistry than that of respiration. Here true chemical changes take place, as is proved by a comparative analysis of the air taken into the lungs, and that expired. The chief product is carbonic acid, and hence it is fair to infer that charcoal undergoes a change in the lungs, similar to that which it suffers when it burns in the open air. Here, then, is a source of a large amount of heat; and, no doubt, the temperature of the body is mainly kept up by the function of respiration.

"If chemical principles alone cannot explain the function of respiration, it does not, therefore, follow that the changes which the air actually undergoes are the less important to be known; since a knowledge of these changes

may lead to the enlargement of our resources in combating disease. It has been found that the formation of carbonic acid, in respiration, is diminished by sleep, by the use of spirituous and fermented liquors, and by the constitutional effects of mercury; while it is increased by muscular exertion and by the exhilarating passions. In what comparative quantities this acid may be generated in different diseases, no extensive series of experiments have yet been instituted to determine; but it cannot be deemed an unreasonable conjecture, that, in disease, important differences may be found to obtain in the products of the respiratory organs.

"Another important function is the production of animal heat, which cannot be successfully studied without a due knowledge of the properties of caloric, a subject which belongs to chemistry. Here is required of the physiologist a clear idea of quantity of heat, as contradistinguished from temperature; of changes of state of aggregation produced by caloric; and of the circumstances under which it is absorbed and given out. In relation to the constant liberation of caloric in the animal economy, which maintains a nearly uniform temperature, it may be said that one general principle prevails; namely, that, when, in any vital action, liquids are convertd into solids, heat is evolved.

"The mysteries of the nervous system are more likely to be explained by studying the imponderable fluids than in any other way. Mere volition causes muscular motion; and the seat of exertion seems to be in the muscle moved; but, in fact, its source is either in the brain or spinal marrow. That the exertion is thence propagated, is proved by the effect of cutting a small fibre, called a nerve, which forms the channel of communication between the brain or marrow and the muscle; whereupon the will becomes utterly powerless. The instantaneous power of volition in propagating an effect through the channel of a nerve, as it were through a conductor, naturally suggests the hypothesis of the passage of a fluid; and, from the analogy of the effect to electrical and galvanic phenomena, leads at once to the plausible conjecture that the fluid in question is some form of electricity or galvanism. What sustains this view are the well known facts that a muscle, recently separated from an animal, suffers violent contractions when a galvanic current is passed through it; and that nature herself has endowed certain animals having the nervous system largely developed, as the torpedo and other electrical fishes, with the power of giving electrical shocks. Besides, the experiments of Dr. Wilson Philip prove that digestion, and other functions dependent on nervous influence, after having been arrested by the division of the nerve going to the organ, may be restored by passing a current of the galvanic fluid from one cut extremity to the other.

"But it is not merely the healthy economy, whose functions are elucidated by chemistry. Many subjects, connected with pathology, receive important aid. In the treatment of the morbid effect of poisons, chemistry furnishes almost our only resource. By suggesting what substances, by chemical affinity, will unite with the poison, so as to render it inert, or comparatively harmless, we are instructed in the knowledge of counter-poisons. Thus, for preparations of anatomy, the best antidote is a decoction of some astringent vegetable; for nitrate of silver, common salt; for baryta and lead, solutions of Epsom or Glauber's salt; for oxalic acid, chalk or magnesia; for corrosive sublimate, the white of eggs; and for arsenic, the hydrated sesquioxide of iron.

"In calculous disorders, the physician cannot determine the proper curative measures without the aid of chemistry. Here it is necessary to know the chemical composition of the urine in health and disease, and to possess accurate analyses of the different kinds of gravel and urinary calculi. Without this knowledge, the practitioner is unable to discriminate between the different diseases of the kidneys, or to apply the appropriate remedies, which, for the most part, rest upon chemical principles for their efficacy.

"But it is not only physiology and pathology that are indebted to chemistry. The department of Materia Medica, also, is under great obligations to it. Here we find a great number of remedies which are the products of the laboratory. To prove this, it is only necessary to remind you of the long catalogue of acids, alkalies and salts, furnished by chemistry to the Materia Medica, and to allude to the inestimable value of the native organic alkalies, extracted from some of our most important vegetable remedies. Of these, I need merely name to you quina and morphia, to call up the recollection of disease arrested as if by a charm, of pain assuaged, and of valuable lives, under the blessing of Providence, snatched from impending death.

"The importance of chemistry as a means of detecting adulterations is so obvious, as scarcely to need enforcement by argument. Let it not be said, however, that, important as this knowledge may be, its possession is valuable only to the apothecary. For, if it be essential that a workman should be able to judge of his tools; how much more important must it be to the physician to possess the necessary knowledge to determine the quality of his medicines, so as to assure himself of their uniform strength, and freedom from injurious impurity.

"Chemistry is connected with one branch of medical jurisprudence; namely, that of searching for deleterious agents in cases of suspected poisoning. Here the chemist comes to our aid, and, by examining the substance supposed to contain the poison by means of appropriate reagents, determines the question with an accuracy and certainty which are truly surprising. To perform these delicate researches, medical practitioners, in this country, are generally called on; and, unless they possess a knowledge of the chemical qualities of the more important poisons, they cannot conduct the necessary examinations, or give the requisite evidence in a court of justice.

"I have thus, gentlemen, presented to you a sketch of the more important applications of chemistry to medicine. I trust I have made out a case, and convinced you of the intimate connection between the two sciences; a connection which cannot be disregarded even by the routine practitioner, much less by the scientific physician."

The lecture of Professor Bache was the first of the series in which he is at present so successfully engaged as a Professor in the Jefferson Medical College, and the same may be said of the

Lecture of Professor Meigs, who commences with a brief allusion to the pretensions, by which he hopes to gain a share of the confidence of his students as a teacher. In treating of his own career, he thus alludes to the teachers under whom he studied his profession, after having paid a feeling tribute to the gentleman, Dr. Fendall, of Augusta, Georgia, under whom he passed his early pupilage.

"In the course of prosecuting my medical studies I had the happiness, gentlemen, to hear the last course of lectures delivered by the American Sydenham. Why the American Sydenham?—one greater than Sydenham—I mean the late Benjamin Rush; of whom it may be said with truth, that he was *medicorum Americanorum omnium, facile facile princeps.*

"The eloquent accents of that venerable man seem to fall upon my ears even now, when I turn back my thoughts to those young days filled with aspiring hopes and fond anticipations of success and professional distinction. I see him now, surrounded by 500 young men, my fellow students and fellow citizens from every part of our wide-spread country, each one gazing intently upon that reverend countenance, wrinkled with age it is true, but still ruddy with temperance, and radiant with the smile which showed how charming is divine philosophy that sat enthroned upon a brow of the rarest benignity and beauty. I see that good old man erect himself in his chair, upon which, on account of his great age, he was accustomed to sit at his

lecture. He puts back his glasses on his forehead—he rises from his seat, and leans with his aged hands upon the desk—he looks abroad over the whole mass of faces and says, "gentlemen, *silence!* I rise from my seat for a special object—I desire you all to remember, that upon this day, I stood up before you while endeavouring to impress upon your minds the necessity of opposing the very beginnings of disease—In order that I might pronounce these two words in your ears—OBSTA PRINCIPIIS, OBSTA PRINCIPIIS." Those words sunk ineffaceably into every man's memory—you hear me repeat them at a distance of twenty-nine years; and it was by such methods as this—by some graceful wave of the hand, by some forcible gesture of the body, by some most apposite illustration, that he endeavoured always to impress deep into the plastic material before him, that signet of his intellectual power whose traces are still visible in the mens medica of these United States—which I firmly believe, is extending its nature and kind, as a good leaven that leaveneth the whole lump, beyond the Atlantic wave.

"There, too, I heard the lesson of the fiery Barton. He had a head that seemed chiseled as by a sculptor, so firm and unwavering was it in its resolute expression. He came there scrupulously dressed, and exactly punctual, to pour the rich and fertilising stream of his discourse, while his face often became the express image of his sentiment, as he felt the warm and generous glow of Linnæus' zeal at the prospect or the hope of some new medicinal herb. When he told us of opium,—of its talismanic properties, and its baleful powers, the tears coursed down his sympathetic cheeks and ours, as as he related the history of the immortal Brown, his early friend—his meteoric fame—his shining intelligence—his dark, and dreary, and dismal fall and death. And then he would gather himself up again, to criticise the doctrines of Cullen, and Murray, and many others, and to urge, urge, urge upon us, the results of his own experience in the therapeutic properties of the preparations of lead, or the nature of American medicines; whilst it was a delight and an honour to sit at his feet and listen, as he poured his lay, almost poetical, over the dry and barren fields of the Materia Medica.

"But there was a Gamaliel there at whose feet one might be deemed happy to sit even all the day long.

"Yes, it was a happiness to sit there, and catch the droppings of that rich fountain of precious knowledge—knowledge that man prays for when his friends, his wife, his child, or when he himself lies prostrate under the assault of an imminent death, or an insupportable anguish. That knowledge that then has no limit to its value, which is impayable, and which man can neither beg nor borrow nor buy; which he can only earn. It is like some bright jewel in a deep and darkling mine. There it lies deep, deep, hidden, low, the prize of patient toil and protracted assiduity: a thousand and a thousand strokes of the axe must win the way to that precious gem; tons and tons of useless ore are to be turned aside before you seize it, all radiant as it is, and glowing with its own pure and proper light: but you seize it at last, and wear it on your brow, where it shines broader than a phylactery, more resplendent than Barbaric gems, or pearls of Ormus or of Ind. It is science—it is sagacity—it is judgment—it is charity—it is love to man—of which that priceless jewel is combined. None win it but the worthy. *Palmam qui meruit ferat*, was the motto of that great teacher, for such was the man who wore that precious gem, OUR Gamaliel in that by-gone day.

"Look at that great amphitheatre, crowded to the outermost ring. No stamping of noisy feet indicated the impatience of a crowd for the arrival of a tardy master. No—at the *point* of time he entered the area. He came, with that cold eye, which you could neither bear nor forbear—its light was different from that of common men. He came with that face of pentelic marble—that hair powdered and dressed in the most finished manner—that blue coat with its metal buttons, closed on his breast on account of his delicate health. There he stood silent for a moment. You would as soon think to cheer a statue, or applaud at the marble features of a corpse, as to

have raised your voices in praise or blame where Dr. Physick stood. He opened his mouth after a cold salute, and from thence proceeded choice words of wisdom, which we were too anxious to gather up in our garners of note books, to stop for a moment to see what other men were doing, or imagine what they were thinking, for so great was our trust in what he should say, that we received it as a gospel; and truth to speak, no word of folly or frolic did I ever hear proceeding from the lips of that great man, who deemed the business of dealing with men's lives and teaching others to do so, one of such solemn and dreadful import that there was no place in it for glee or laughter; and so he acted, and so he always looked—he lived so, and he died in that belief. Dr. Physick was a very great man, gentlemen: You had an indefeasible tendency to stand uncovered in his presence. There was a spotless purity in his character, so that he walked as in a bright cloud of moral truth and beauty. Apollo, the god of physicians, seemed to have inspired the nobleness of his countenance, and to have imparted somewhat of the *mens divina* to his whole moral constitution. You and I may live long, gentlemen, yea, and our children after us, before so rare a combination of great and admirable qualities shall again conspire to produce the perfect pattern and model of a surgeon and physician.

"But why have I not yet spoken of *him*, the beloved of the class! By what epithets shall I attempt to particularize those singular good qualities, which, by a happy conspiration, united to make up the character of that good old man—the idol, the darling of the classes? Do you not see that powdered head of his, with its well-adjusted locks and queue? Dr. Wistar enters the area, followed by a cloud of witnesses, bowing often, and rubbing his hands, and with a face on which sat a pleased and yet bashful expression—a mixture of emotions which gave it a most peculiar character,—chiefly delightful, however. He came there amidst sounds of greeting, and the wreathed smiles and looks of exchanged congratulations of the superimposed circles. Men witnessed his entrance as they witness the completeness of preparation for some great feast; there was a satisfied feeling already, like that with which a company inhale the rich perfumes and odours of a feast that is set.

"He lifted his hand, and in a very short, quick expression, he said, *Gentlemen!* Henceforth all was still—a profound silence, broken only by the arrival of some tardy student, which was regarded as a wrong done to the whole company, and a rudeness to be visited by frowns, or even more decided marks of disapprobation, particularly if the white-haired teacher should stop in his career to look around the sky-parlours. Ah, gentlemen, those were the halcyon days of medical instruction!—days ever to be remembered. But those good men are gone off the stage of the world. The eloquent voice of Rush is silent where he lies yonder in his grave; and Wistar sleeps among the undistinguished dead of his sect, in that ground to which I followed his remains—one of the vast concourse of his fellow-citizens, treading with mournful steps, and slowly, the way taken by the dead body of a public benefactor. I felt that day—grieved as I was to part forever with one who had gained my whole esteem and reverence—that I was honoured in being a physician, for my profession was exalted and honoured in his life, and by the public testimonials to his worth and many virtues rendered at his death.

"There, too,—and why not place him in the front rank of the men of that age?—there, too, was the beautiful Dorsey, with a face as bright as the morning, and open as noon-day. An ambition of the highest reach urged him onward in a career that was nobly run, and would have carried off the highest prize, had he been spared to the country. Conquering by the most arduous struggles certain natural impediments of his elocution, he had just attained the perfect victory. He had just stepped on a lofty stage of action, when the angel of death struck him down too, that he might, though young, belong to that great age of American medicine. He came not down to our times, but was gathered to his brethren and his like. He sleeps here among

them. The American Sir Astley, is a title which he deserved, not more by the graces of a most ornate mind and manners, than by the great surgical skill and renown which he so early vindicated to himself.

"But I have not spoken of my good friend, Dr. James—Thomas Chalkley James, Professor of Midwifery in that day—a member of the Society of Friends,—a *good man*. There are many persons here, I suppose, who remember the quiet, calm, gentle, modest style with which he came out into the rotunda to meet us in the afternoons. He brought there written lectures filled with learning, ransacked from the whole stores of that time, and arrayed for us into an order and a show that made them always delightful,—garnished, as they were, with apposite classical citations, whether from the ancient or modern authors. He brought, too, the results of a great experience in practice. He brought there, also, his modesty, which never left him from his earliest youth, and which frequently sent the mantling blood over cheeks and brow to testify that he had the deepest sense of the delicacy of the task assigned to him—that of exposing to hundreds of young men, those trembling secrets of the lying-in chamber, which he had blushed to learn, and which he more readily blushed to tell. Take him all-in-all, and you shall search long and far before you shall find a more honourable, upright gentlemen—a riper scholar—a better teacher, or a better man.

"Such were the days, and such the men, when I studied medicine here, near thirty years ago, in the venerable University of Pennsylvania." p. 8.

In the course of his lecture, Professor Meigs well describes the difficulties and responsibilities that beset the practitioner of the important department over which he presides in the Jefferson Medical College; but, at the same time, holds out ample encouragement to the student, who determines to make himself master of the subject, and to practise it understandingly.

Of the *lecture of Professor Dunglison* we can obviously speak only in relation to its objects, not of the mode in which it is executed. As it devolved upon him to introduce his new colleagues, he necessarily speaks of the organisation of the school; and of its prospects; and it may be added, that the increased number of students, now in attendance, have proved the correctness of his favourable anticipations. The catalogue of students will show a considerable addition—and this notwithstanding the death of one colleague during the last session, and the tranference of the services of two others to the new university at New York. How high then must be the prospects of the school for the future, and especially when the unusual number of first course students is borne in mind, all of whom will probably return to its halls! Last year, the catalogue of students contained the names of 163. This year it will not fall much, if any, short of 200.

We extract from Professor Dunglison's lecture the following description of the present condition of medical science, compared with that which it presented at no distant period.

"It has always been a pleasing topic with me, and it is germane to the subject of this discourse to advert to a few (and our time will admit of a few only) of the improvements that so eminently distinguish the middle or an approach to the middle of the present century, from the same period, and even from the termination of the last.

"Commencing with *anatomy*, which is the basis, but only the basis of the other departments of the science, we find it, instead of being limited to a knowledge of the organs exhibited on dissection, as it was in those days, now embracing an acquaintance with the absolute and relative situation of the various organs, or what has been termed *Surgical* or *Topographical*

Anatomy; depicting the relations which the parts bear to surgery and pathology; unravelling their intimate texture and arrangement, their correlations, the origin and formation of the human body, the character of its numerous constituents, and the changes that supervene in the different stages of existence—constituting what has been termed *General Anatomy;* and investigating the relative importance of organs; their presence or absence in the animal series; and from such investigation establishing great general analogies and fundamental laws, that may be applicable to all,—or what has been termed *Philosophical or Transcendental Anatomy.*

"The doctrines of Histogeny, or of the mode in which the tissues are formed, even from the cytoblast or 'germinal cell,' have been a subject of interesting study with the more recent anatomists; and the works, that are now issued from the press on this subject, show a degree of enlightened microscopic research unknown except in very recent periods. The first part of the Elements of Physiology of Wagner exhibits a depth of investigation on this subject, and on the development of the new being, which cannot but astonish those who are unacquainted with the profound labours of modern embryologists. These, however, will form subjects of contemplation for you hereafter.

"Of comparatively recent origin, too, is *Pathological Anatomy*, one of the greatest aids to diagnosis or to the knowledge of disease, but still an aid only; forming, indeed, but a link in the chain of evidence, and very often exhibiting to us the result, rather than the nature, of the diseased action; yet worthy of all attention from him who would desire to know his profession in the manner in which it ought to be known.

"When we pass from Anatomy to *Physiology*, how manifest are the changes that have occurred in the period we have chosen for our survey! Fifty or a hundred years ago, although a bright light was here and there apparent, they were few and far between, and served but little more than to render the darkness visible. Formerly, *dead anatomy* was esteemed the sole foundation of medical study. Since the time of Haller, a knowledge of the *living body*—the *Anatome animata* of that illustrious physiologist, physician, poet, philosopher and mathematician, for he was all—has been added as an essential prerequisite; and no one now pretends to comprehend the laws and phenomena of disease, until he has endeavoured to fathom the laws and phenomena of life. It is obvious, indeed, that before an altered condition of the organs and tissues can be understood, we must be familiar with the healthy condition that preceded it. Physiology is a modern science. The medical press teems with new productions of value. Germany led the way; France followed in her footsteps; and the nations of the Anglo Saxon race succeeded; all vieing with each other for the advancement of this important branch of the science.

"We hear no longer of such questions as were propounded by the learned Sir Thomas Browne, whether, for example, a woman could be impregnated by bathing in the water that had been used by a man a short time previously; and if we occasionally meet with instances like those afforded by such men as Richerand—the most fanciful, by the way, of all modern physiologists—who considers that the reason why the languages of northern Europe contain more consonants than those of the south, is, that the mouth may not be too widely opened, and thus the cold air be prevented from getting, in too large quantities, into the stomach,—we mark them down as mere individualisms, which have no influence on the steady forward course of the science.

"*Surgery* has proceeded onwards in the career of improvement. Operations have been devised within the last fifty years, which must be the source of admiration to the mere philanthropist. Within the last few years, she seems to have had her era of signal inventions, if they may be so termed. The operation of crushing the stone in the bladder, and that for the division

of tendons in cases of deformity, would of themselves signalise the period at which they were introduced.

"It is strange, gentlemen, that the latter operation had not attracted extensively the attention of surgeons until deep in the second quarter of the nineteenth century. Of old, a dread was entertained of dividing all fibrous structures, and it was considered hazardous to incise the bladder in cases of lithotomy: that dread soon passed away; yet apprehension, until within the last few years, appears to have been entertained of serious inconvenience from the division of tendons. It is now shown to be a harmless operation. The results have, indeed, been triumphant; deformities of the most distressing character have been rectified, and much mental misery has been removed. Yet the enlightened and humane surgeon is not led to operate more frequently than formerly, or to make constant theatrical displays of his dexterity, with the view of obtaining fame to himself. One of the most important improvements in modern times has been the conviction, that mutilation is often unnecessary, where, in former periods, recourse to the knife would have been regarded as indispensable. Since the introduction of rail-roads, a new form of accident has become common, and has greatly augmented the necessity for amputation: yet this is never had recourse to unless, after full and mature deliberation, all attempts to save the limb are considered fruitless. The skilful and benevolent surgeon has more gratification in saving a single limb that has been doomed to the knife, than in his most brilliant operations.

"As a branch of surgery, and likewise of medicine, *Obstetrics* has kept pace with the parent stems; the practical part has been simplified in its means and appliances; and the treatment of the pregnant and parturient female has been so much improved, both in the way of hygiène and therapeutics, that the value of life has been surprisingly increased amongst the most interesting part of creation.

"*Chemistry* has experienced such changes in the interval I have selected as to exhibit scarcely any of its former characters. Its nomenclature, although necessarily unfixed in consequence of the improved and improving acquaintance with the constitution of chemical compounds, has wrought an important change in the science; and its followers are daily adding to the rich stock of facts and principles which it possesses. It is an interesting and important department of medical study, and merits your close attention. We are every day looking more and more to Chemistry to explain certain physiological and pathological phenomena in our own bodies. Without it, indeed, we could not readily account for several pathological aberrations,—the depositions that take place from the urine, for example, with the appropriate methods for preventing them. The action of antacids in obviating acidity of the stomach, and of disinfectants in destroying contagious and other miasmata or effluvia, look likewise for their elucidation to Chemistry. The whole subject of Toxicology, in its relation to tests and antidotes, belongs to Chemistry; and, in modern times, we are indebted to it for most valued gifts to Therapeutics, which infuse certainty into our prescriptions in some cases, and in others furnish us with articles adapted for the better combating of disease. I need but specify the active principles of the bark, of opium, and of the nux vomica; and the simple body—iodine—which we administer with so much success in many diseases.

"Our *Materia Medica*, or catalogue of therapeutical agents, has received rich acquisitions in modern times. It has gained some energetic articles, and it has lost some of the more inert. It can still spare many that are retained on insufficient titles, and the day must come when it will be greatly reduced. Already the testimony adduced in favour of many of the agents is admitted to be slender and fallacious: yet we are loth to discard them, and they hold their place in consequence of their former reputation.

"A comparison of the excellent Dispensatory of my friends, Professors Wood and Bache, with that of Quincy, so long the standard, will exhibit the signal difference between the condition of Pharmacology now, and at a

former period; and I trust, that the revised Pharmacopœia of the United States, assigned to the same able hands, with the assistance of the Colleges of Pharmacy of this city and elsewhere, and any feeble aid that I may be able to render, will be an additional evidence of the advanced condition of the same important department of medical science among us.

"Lastly; the department of *Medical Practice*—hygienical and therapeutical—if not signalised by any extraordinary discovery, has proceeded steadily onwards; and although we may have difficulty in tracing its progress from year to year, the change between the middle of the last century and the present period is great and impressive. It is not easy for us to prove statistically the improvement that has taken place in our mode of treating disease; yet it has been striking. By the assistance of pathological anatomy —by the introduction of auscultation, and the other physical signs, for which the name of Laënnec will flourish illustriously in the annals of our science —and by the better system of observation, and of tracing effects to their causes, that now prevails—we are enabled to diagnosticate disease with greater certainty, and, knowing the disease, to adapt our therapeutical agents accordingly.

"It would be impracticable for me, in the course of this lecture, to bring forward instances in proof of this position, which will be ably and amply confirmed by every lecture of my friend and colleague, the Professor of the Theory and Practice of Medicine. Could one of the worthies of our profession, who flourished in the middle of the last century, be permitted to revisit the earth, how strange would everything appear around him! Although, like the venerable patriarchs of all ages, he might sigh for 'the good old times,' and doubt that all the changes were improvements, he would find it necessary to renounce his ancient ideas, or consent to be honoured merely as a Rip Van Winkle relic of antiquity, in the very place in which he had been formerly looked upon as an oracle." p. 22.

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We have received two other introductory lectures—one from Professor Bartlett, of Transylvania University, and another from Professor Hamilton, of Geneva College, N. Y. Both of them are very creditable to their authors. That of Professor Bartlett exhibits considerable thought, usually in the right direction, and generally well expressed. The author is a strong supporter of the school of observation, as all must be: but he overrates, we think, the acquisitions to the science from the labours of its disciples. Observers have always existed, and in all ages have been pertinaciously wedded to the results of their experience; and if we examine philosophically the records of the past—and we would not entirely discard those of the present day—we find, that the science has suffered more from observations, as they have been termed, or facts, than from theories, idle as these have often been. The following extract from Dr. Bartlett, which renders merited credit to the zeal of several of the younger members of the profession in this country, refers to solutions by them of problems, which are still disputed; many of the modern British writers by no means admitting the conclusions as applicable to their own fevers, that have been drawn from the observation of a few of them on this side of the Atlantic.

"I wish to remark further, that there has never been a time when we had as good cause for self-congratulation as we now have. In the course of this lecture I have expressed myself freely respecting the short comings and the vices of medical philosophy, and the disastrous results of these upon practical medicine. I have done this from an honest conviction of its truth, and from a strong feeling that in no other way could I do as much service to you.

"Not less strong than this feeling in regard to the errors of the past, and even of the present, is my conviction of the certain progress and improvement of medicine. The prospect of the future, which presents itself to my contemplation, has more in it of vision than of faith. I have an undoubting confidence, resting alike on the experience of the past and on the essential nature of things, that our science and art are destined to go on in a course of great and almost indefinite advancement. Never before, within the same period of time, during the existence of the science, has it made such rapid and sure progress as for the last forty years. Within the last twenty years, especially, have the best minds in the profession been devoting themselves, with a singleness of purpose, with a patient industry, with an untiring zeal, and with a lofty and disinterested love of truth, before unequalled—before unknown—to a thorough, comprehensive study of disease. Never before has such searching inquisition been made into the phenomena and relations of morbid action; and never before with such triumphant results.

"Every where the time is full of the brightest promise, and especially so is it here. Some of the most common, the most violent, and of course the most important and interesting forms of disease, as they occur in and are modified by our own climate and position, are yet to be fully studied and compared with their cognate and analogous forms abroad. And this can only be done in the spirit of that philosophy, which it has been the object of this lecture to define. Guided by this philosophy, I cannot conceive a richer field than that which is spread out before the American Physician. Already have there entered upon it ardent and active labourers, not a few, thoroughly furnished to their work. They are taking possession of its treasures:—they are writing their names on its history:—they are gathering garlands for their temples, which shall never wither away. Already have some of our young men, even, solved important problems in pathology, which had foiled the skill, and eluded the dexterity of our British brethren.[1] Happy and fully satisfied shall I be, if I can, even in the slightest degree, be instrumental, in preparing you, either by infusing into your minds the right spirit, or furnishing means to enable you to go forth and occupy, worthily, the rich inheritance which awaits you.

"As in the direction of all our other relationships—social, moral, economical—the future opens itself before us in *two* paths, so does it here. One of them, the great and common highway of *False Philosophy*, is broad, well trodden, and shows itself fair to the eye, *at its entrance*. Flowers blossom along its borders: syren voices sing the safety and the delights of its course—the beauty of the scenery through which it runs, and the grandeur of the Temple of Truth to which it leads. Multitudes have thus been led, and multitudes are still led to enter upon this enchanted ground. But the pathway, so pleasant at its beginning, soon loses itself in uncertain wanderings and in a constantly thickening obscurity. The melody of the morning outset is soon changed to dissonance. Discordant and jarring voices, issuing from the thousand and one belligerent and angry schools, into which the travellers are divided, make an utter Babel of the place. Every leader of every sect proclaims his own little rush light—kindled at the lantern of some will-o'-the-wisp—and glimmering feebly in the fog—to be the true sun of the medical world; and his own crooked and misty path of the confused labyrinth, in whose mazes of cloud and quagmire they all wander, to be the only sure and safe road to the truth.

[1] Dr. GERHARD, of Philadelphia, was the first to point out the difference, both in symptoms and pathology, between the true British typhus, and the common continued typhoid fever of the United States. In the whole range of practical medicine, there is no single circumstance, which, both to the British and American practitioner, has been the occasion of so much obscurity and confusion, as the confounding of these two diseases, resembling each other in many respects, but still differing from each other, as clearly and as distinctly as measles and scarlatina.

"The other is the pathway of *True Philosophy*—in our own science, as in all the rest—narrow and rugged at its entrance, dimly lighted, it may be, and filled with obstacles which it is difficult to surmount. But nevertheless, fear not, and be wise in your choice. This pathway shall widen as you proceed, and every successive step, in your onward and upward career, shall be surer and easier than the last. The light shall brighten as you go on, the earth shall grow firmer under your feet, the heavens shall spread bluer and broader over your heads. The horizon shall widen around you, and every hour shall bring within the scope of your vision objects of new and boundless interest. You will find yourselves, too, in a small, perhaps, but a glorious company, led on, in the far distance, with his flowing beard, and his venerable form, by the old Physician of Cos. It is the path which was trodden by the Sydenhams, the Hallers, the Hunters, the Bichats. It is the path which led Harvey to the most brilliant achievement in the annals of physiological science. It is the path which led the more fortunate Jenner to that discovery, which has embalmed his name in the gratitude and the love of countries, and of all times. It is the path which led Newton—*clarum et venerabile nomen*—UP, UP, to that loftiest pinnacle ever reached by uninspired humanity, crowned with light of ineffable brightness, where the veil, which, from the creation of the world, had hung before the universe, hiding its wonder and its mystery, was rent, and man was suffered to look, for the first time, out upon the beauty, the majesty, the unchangeable order, of the handiwork of God. Into this path, and not into the other, be it our effort and our happiness to enter!"

We have not space to say more than that the introductory lecture of Professor Hamilton contains excellent advice to his young hearers.

MISCELLANEOUS NOTICE.

[We cheerfully comply with the request of Dr. Carpenter in inserting and procuring the insertion of the enclosed correspondence. The request of an aggrieved professional brother, and of one whose reputation is so much connected with the cause of true science, is to us in the light of a command. Dr. Carpenter has been charged with the sins of another. It is but right that all should aid in the disssemination of his assertions of innocence.]

Copy of a Letter from Dr. W. B. CARPENTER *of Bristol (England,) to Professor* DUNGLISON *of Philadelphia, in reference to certain charges made against the former, by Dr.* MARTIN PAINE, *Professor of the Institutes of Medicine in the University of New York, in his "Examination of Reviews, &c."*

BRISTOL, Nov. 16, 1841.

My Dear Sir,—Having just received from Dr. Paine a copy of his "Examination" of the Critique on his Medical and Physiological Commentaries, which appeared in the April Number of the British and Foreign Medical Review, I find, to my great surprise, that Dr. P. has thought himself justified,—not only in singling *me* out as the Author of it, and in animadverting upon what he considers to be *its* misrepresentations, as if they were *mine* (thereby attempting to make that a matter of personal discussion between us, for which the Editor of the Review holds himself responsible,)—but also in fixing upon me a charge of literary plagiarism, which is calculated, if I allow it to remain uncontradicted, to do great injury to my personal as well as to my scientific character.

Before going further, I must express my astonishment that any person holding the position which Dr. Paine occupies, should commit himself to so grave a charge against an individual, to whose discredit he *knows*

nothing, upon evidence so flimsy as that which he adduces;—especially as he must have been aware that, from the distance of the accused party, his defence could not be laid before the public, until many months should have elapsed since its publication, during which time, an injurious, impression would have been formed not easily to be eradicated. And I think that I have further a just right to complain, that Dr. Paine's inculpation of me is not confined to surmise; but that, after he has proved his point to his own satisfaction, he has taken it for granted, and, throughout the latter part of his pamphlet, has continually coupled my name with the accusation of gross plagiary.

The evidence which Dr. P. adduces in support of the charge, is briefly the following:—Having made up his mind, from certain coincidences of opinion and of expression, between the Critique on his Commentaries, and my Principles of Physiology, that I must be the writer of the former, he has searched in previous numbers of the same Review for articles written, as he imagines, by the same author. In this search he thinks himself assisted by references occasionally made from one article to another,—the complete fallacy of which kind of evidence is exposed in Dr. Forbes's letter. Upon the same evidence, I must have been the Reviewer of my own work; and I am not certain, whether Dr. P. does not mean to insinuate as much.—Any person, however, who carefully reads that Review, which I did not see until it was in print, may find abundant evidence of the absurdity of such an idea. With respect to the other chief source of Dr. P.'s evidence,—coincidence in opinion, and in the mode of expressing it,—I will only say that Dr. P. shows great ignorance of the state of physiological science in this country, if he imagines that the opinions expressed in my Principles, on the subjects alluded to, are at all peculiar to myself; and it is very natural that one writer should almost unconsciously adopt the phraseology of another who has recently treated of the same questions, when desiring to express the same ideas.

So much for the evidence on which Dr. P.'s charge is founded. I have thus examined it, merely to show how unjustifiable it was in Dr. P. to charge me with the perpetration of a gross literary theft, upon no better grounds. The charge itself,—that in a review of Hunter on the Blood, in a former volume of the same Journal, I unceremoniously adapted certain passages from Dr. Channing's Essay on Milton, to a very different purpose,—is easily disposed of. *I did not write that review.* To those who know me, my simple denial would, I am confident, be amply sufficient; but for the satisfaction of Dr. Paine, who, in his ignorance of my character, may think me as capable of asserting a falsehood, as of stealing a paragraph, I enclose a note from Dr. Forbes confirmatory of my assertion.

Dr. Paine considers that his identification of me with the plagiarist is triumphantly confirmed, by a correspondence which he imagines that he has detected, between certain passages in my Principles of Physiology, and others which he has selected from Dr. Channing's Sermons. I am myself completely at a loss to discover this correspondence; and my friends here find it equally difficult. The falsity of this charge is as easily proved as that of the other; for *I have never* (I speak it almost with shame) *read the Sermons* from which Dr. P. quotes. The ideas which I have expressed, have so long been familiar to my mind, that I cannot imagine that they involve anything peculiarly *Channing-ian.* If any correspondence do exist, it is easily accounted for by the fact, that I received my education from one, who was for many years the respected and attached friend of that illustrious man, and whose mind, cast in the same mould with his, impressed mine with those habits of thought, which have led to whatever similarity may present itself between our published opinions.

In regard to Dr. Paine's criticisms upon the scientific opinions I have expressed in my Principles of Physiology, I shall not now offer any remarks; nor do I intend to take up the gauntlet from an opponent, who has shown

himself so destitute of judgment and of good feeling. Of the merits of our respective productions I am quite content to leave the public to judge.

Having few means of placing my statement before the Medical Public of America, save through your mediation, I take the liberty of so far trespassing on your kindness, as to request you to gain insertion for it in such Journals, as may give it a circulation equal to that of Dr. Paine's calumnious charges against me.

Believe me to remain, Dear Sir,
Respectfully and sincerely yours,
WILLIAM B. CARPENTER.

From Dr. FORBES, *Editor of the British and Foreign Medical Review, to Dr.* W. B. CARPENTER.

Dear Carpenter,—As I think it would be a piece of silliness, only second to that of writing and publishing the "Examination," to attempt any detailed or serious reply to Dr. Paine's wordy reclamation, or any justification of the article in the Review to which it refers,—I shall take no notice whatever of his attack, further than relates to the charge of plagiarism. *This is true*, so far as the writer of the review on Hunter is concerned, but *false* as concerns *you*,—since you did not write that review. This I am ready to state to all persons, at all times, as the truth, without any reservation or equivocation. The conduct of the writer of that review, in palming upon the Editor a portion of the writings of another for his own,—if really done intentionally and with a view to deceive (I would fain hope that the fact may admit of some other interpretation,) cannot be sufficiently reprobated. Although, as being the first specimen I had had of this person's writing (and, with one trifling exception, the only one I have ever had) I might be forgiven for not suspecting the authenticity of the surreptitious passages, I take shame to myself for being so little acquainted with the eloquent writings of Dr. Channing, as not to detect the theft before the MS. left my hands for the press.

Perhaps when Dr. Paine discovers that he is mistaken in the affiliation of this portion of the Review, he may feel somewhat less confident of the evidence by which he thinks he has traced the authorship of other articles in it to you. I certainly shall not gratify his curiosity on this point, by either affirming or denying the accuracy of his conclusions; and I do not see any reason why you should.

It is singular that Dr. Paine should have been so ignorant of the ordinary mode of conducting a Review, as not to know that the reference from one article to another is no proof whatever of the identity of the authorship of the two,—even when this reference is made by the writer of the latter article. But, most commonly, such references are made by the Editor, without any communication with the original writer, in the exercise of the privileges inherent in the office of the great editorial WE.

In looking at the vast accumulation of words in Dr. Paine's pamphlet, I confess that I feel regret that the review of his book (just and accurate as I still hold it to be) was not more favourable; as it is melancholy to think that so much time and pains should have been stolen from tasks of usefulness, and expended in elaborating a work, which, of course, no human being will read, except the author himself, perhaps the writer of the inculpated article, and, alas, the Editor of the Review.

It is lamentable to see how this mortification of Dr. Paine's self-love has clouded his judgment throughout the whole composition of his pamphlet; and this obfuscation is nowhere more conspicuous, than where he attempts to convict you of plagiarising, in your "Principles of Physiology," from Dr. Channing. The very examples he adduces confute the charge.

Believe me, Dear Carpenter, to be most truly yours,
JOHN FORBES.

OLD BURLINGTON STREET. Nov. 15, 1841.